FP Lock User Manual

Version: 1.1

Date: Nov. 2010

About This Manual

This manual introduces the Fingerprint Lock (FP Lock) interface and menu operations. For the FP Lock installation, see the animation installation instructions.

Our products are subject to update from time to time, so our company will neither make a commitment to guarantee the consistency between the actual products and this document, nor assume any responsibility for any dispute arising out of the discrepancy between the actual technical parameters and this manual. This document is subject to change without prior notice.

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1. Instructions for Use

✍ **Note:** Functions marked with "★" in this manual are only supported by specific product or customized product, and will be marked after that.

1.1 Functions Introduction

1. By improving the perfect combination of biometrics and cryptography, our FP Locks ensure double security through the fingerprint plus password unlocking feature.
2. The Organic LED (OLED) display affords clear and bright readouts that make our FP Locks intuitive and easy to use. You can use our FP Locks with ease after following the operation instructions.
3. Supports to set classified privileges for super administrators, administrators and ordinary users.
4. Supports deletion of all or the specified registered user data.
5. Supports firmware upgrade, uploading/downloading of user information and unlocking records through the USB pen drive.
6. Supports offline browse of unlocking records.
7. Supports accurate display of time and date, with annual deviation less than two minutes.
8. Supports temporary power supply of backup battery.
9. You can set the FP Locks to be in the Normally Open (NO) state in special cases.
10. Supports display of the battery charge level and trigger low voltage alarms.
11. Features an electric clutch handle design which helps effectively prevent the FP Lock failure caused by damage of the internal structure as a result of the forced destruction of the handle.

12. Supports single latch lock (both 60 mm and 70 mm locks) of American standard, as well as the deadbolt lock mortise.
13. The maximum capacity is 500 fingerprints. The maximum unlocking record is 30000 logs.
14. Unlock mode: fingerprint, password, mechanical key.

1.2 List of Installation Accessories

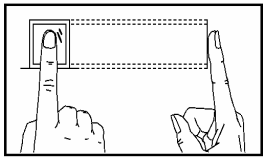
Table of Installation Accessories

SN	Name	Quantity	Unit	Remarks
01	Front panel assembly	1	Set	
02	Square shaft of handle	2	PCS	One needed to select base on the door thickness
03	Mortise	1	Set	Single latch lock
04	Rubber gasket	2	PCS	Including the one on the front panel assembly
05	Rear hold-down plate	1	PCS	
06	Screw	6	PCS	Two of screws needed to select base on the door thickness
07	Rear panel assembly	1	Set	
08	Battery	4	PCS	Four alkaline AA batteries
09	Battery cover	1	PCS	
10	Strike box	1	PCS	
11	Strike plate	1	Set	
12	Wood grain screw	4	PCS	
13	Backup battery	1	PCS	9V
14	Mechanical key	2	PCS	
15	Installation disk	1	PCS	
16	Mounting paper	1	PCS	

1.3 Fingerprint Press Introduction

Enroll fingerprint by pressing index finger, middle finger or ring finger (thumb and little finger are clumsy).

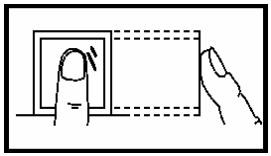
1) Proper press:



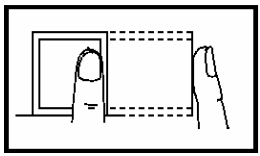
The finger must be flat to the surface and centered on the fingerprint sensor.

2) Improper press:

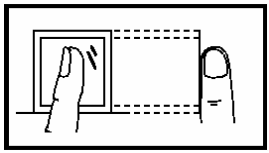
Upright



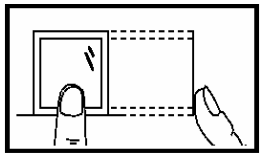
Off-center



Slant



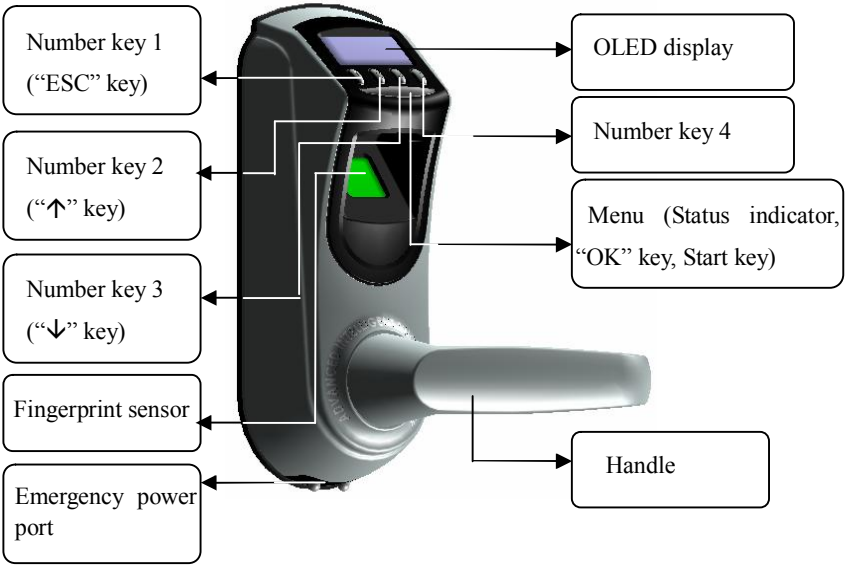
Off-center



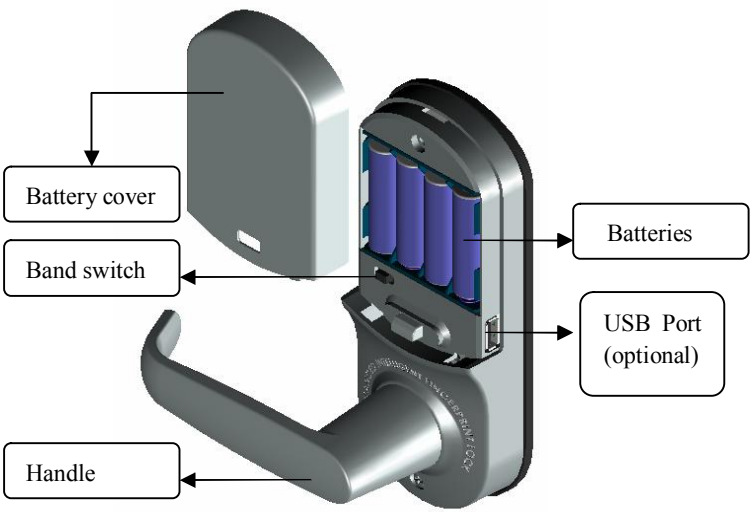
Please adopt the correct way to place the finger to avoid the poor performance of device cause by improper operation.

1.4 Device Appearance

Front view:



Rear view:



Number key 1: Press this key to exit current operation, press and hold this key to power off the FP Lock. The number key "1" doubles as "**ESC**" key.

Number key 2: This key is used to manually increase (when held this key, the display values will rapidly increase) the setup value or navigate among menu options. The number key "2" doubles as a "↑" key.

Number key 3: This key is used to manually decrease (when held this key, the display values will rapidly decrease) the setup value or navigate among menu options. The number key "3" doubles as a "↓" key.

Menu key (Status indicator): This key can be used to start the FP Lock; press and hold this key for three seconds on the initial interface to open the main menu; this key also doubles as the "**OK"** key.

The green LED indicator blinks when the FP Lock operates properly and the red

LED indicator is on for three seconds if an error occurs. The green LED indicator is on for three seconds when an operation succeeds.

Band switch: If you cannot access the menu interface due to the loss of administrators for some reasons, proceed as follows: Press and hold the **Menu** key for three seconds to display the administrator verification interface, and then turn the **Band switch** at the rear of the lock to left or right, and open up the menu as a super administrator.

OLED display: The black-and-white OLED display features white graphics or text against a black background.

Fingerprint sensor: You can only collect or match fingerprint by pressing your finger on the fingerprint sensor when the light in the fingerprint sensor window is on; otherwise nothing happens when you press your finger on the fingerprint sensor.

Note: When you cannot power off the FP Lock due to the exception of program, press and hold the **ESC** key to power off and then restart the FP Lock. It is not recommended to power off the FP Lock by this way when the FP Lock operates normally.

Emergency power port: You can adopt an external backup battery to open the lock in the event of unlocking failure due to insufficient power supply of the FP Lock.

Keyhole: You can use a mechanical key for emergency door opening.

USB port (optional): The USB port is used for firmware upgrade, uploading or downloading user information and unlocking records through a USB pen drive. Only some models have USB port options.

1.5 Installation Requirements

Recommended Tools:

You may need the following tools while following the instructions to install FP Locks:

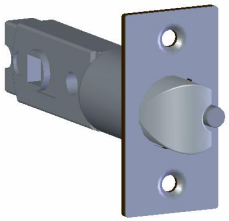
- A ruler.
- A marker pen.
- A drilling tool.
- A cross screwdriver.

1.5.1 Precautions

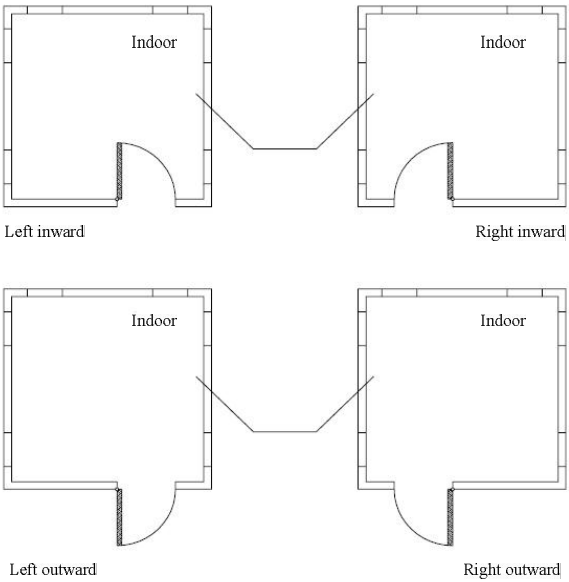
1. The FP Lock is applicable to doors of 35–70 mm in thickness. Be sure to list your special requirements or remarks for FP Locks to be installed on doors thicker than 70 mm before placing an order.

2. Before ordering or installation of single latch lock, please confirm the corresponding accessories.

Single latch lock:



3. Please confirm the door opening directions. Assume you are standing outside and facing a door and then there are four door opening directions: Left inward, left outward, right inward and right outward. Left inward/outward means the door swings inward/outward with hinges on the left; right inward/outward means the door swings inward/outward with hinges on the right, as shown in the following figure:



4. Ensure the central point of the handle is about 1 meter above the floor.
5. Ensure all the accessories installed on the right position.
6. Please follow the animation instructions to install FP Locks.

1.5.2 Backup Battery

The FP Lock supports temporary use of external DC power for fingerprint or password matching and unlocking. But when it connected with an external battery, it cannot provide such functions as enrollment, deletion and setting, so as to prevent data loss as a result of power instability.

As shown in the figure below, connect a 9V battery to the **Emergency power port** at the bottom of the FP Lock, regardless of polarities.

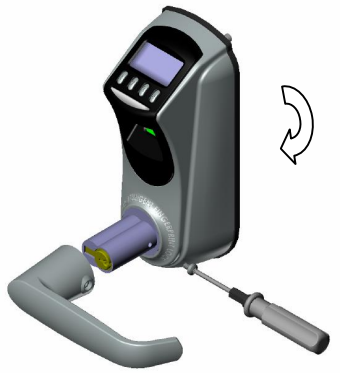
If you power off a FP Lock without closing the lock during the use of external power, the lock mortise will not automatically return to its original position. That is, the FP Lock remains in NO state. To solve this problem, you can replace the battery and then verify to open the lock once to have the lock mortise back in position.

1.5.3 Backup (Emergency) Mechanical Key

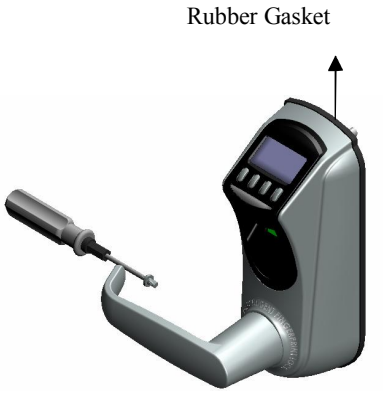
1. Remove the screw from the lock handle, and take off the handle.

2. Insert the key, turn to right or left 180º to unlock the door.

1.5.4 Convert of Unlock Direction



1. Remove the screw of handle, then take off the handle and rotate 180º.



2. Reload the handle and fix it with the screw.

1.6 Precautions

1. We strongly recommend you to enroll at least one administrator after installing the FP Lock. And then you can enroll the ordinary users.

2. Do not remove batteries when matching, enrolling or deleting fingerprints because the sudden power-down may result in data loss of FP Locks. Before removing batteries, make sure the FP Lock is not in working state.

3. It is recommended to replace the FP Lock batteries once within six months, to avoid the damage to the circuit due to the battery leakage. Do not use batteries with poor quality.

4. When installing a FP Lock, connect the plug to the socket properly. Improper connection may lead to FP Lock failure.

1.7 User Privileges

The user privileges are classified into three types: Super administrator, administrator and ordinary user.

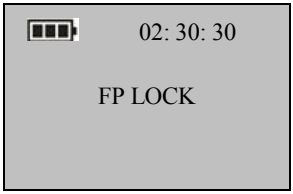
Super administrator: Refer to users who have access to all system functions and modify all system settings.

Administrators: Refer to who users who have access to all operations except performing advanced settings and enrolling super administrator.

Ordinary users: Refer to all users other than the super administrators and administrators. Ordinary users only have access to the fingerprint matching and unlocking functions.

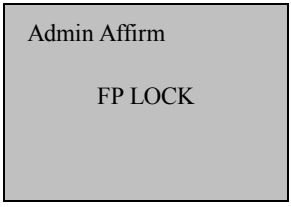
1.8 Time Setting

You need to set the correct date and time when you first use of a FP Lock, the operations are as follows:

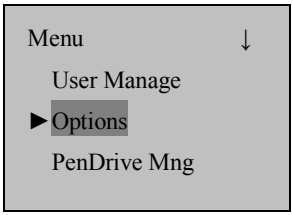


1) Power on the FP Lock by pressing the **Menu** key to open up the initial interface, as shown in the figure on the left.

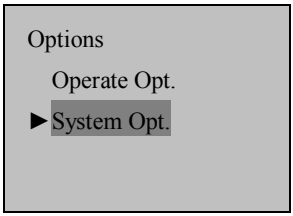
Note: The "[battery]" icon on the initial interface is the battery icon indicating how much charge remains. On the top right corner of the initial interface, the display alternates between date and time every 5 seconds.



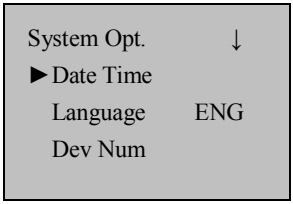
2) Press and hold the **Menu** key for three seconds to access the menu interface. The administrator needs to verify and then move to the step 3). If there is no administrator, move to the step 3) directly.



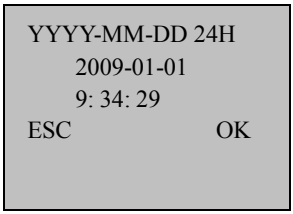
3) Press **2/3** to select "Options." and then press **Menu**.



4) Press **2/3** to select "System Opt." and then press **Menu.**



5) Press **2/3** to select "Date Time" and then press **Menu**.



6) To modify date or time, press **2/3** to move the cursor to the desired option, and then press **2/3** again to enter correct date or time. Press **Menu** to save your settings.

Note: You can set the date between January 1st 2003 and December 31st 2032. To set the date beyond this range, you need to consult our commercial representatives or technical support engineers.

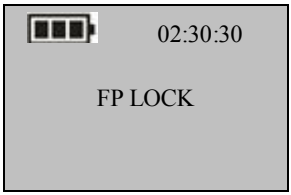
1.9 Operation Overtime

In any user operation state, the default overtime value is 5 seconds, after 5 seconds the lock powers off automatically.

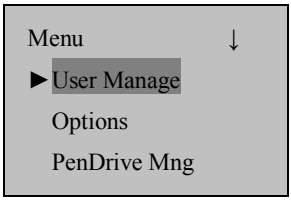
2. Enrollment and Verification

2.1 Enrolling an Administrator

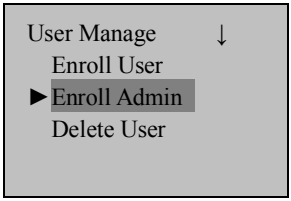
If the FP Lock has no administrator, you must enroll at least one administrator before enrolling ordinary users. To enroll an administrator, proceed as follows:



1) Power on the FP Lock by pressing the **Menu** key to open up the initial interface. Press and hold the **Menu** to display the menu interface.



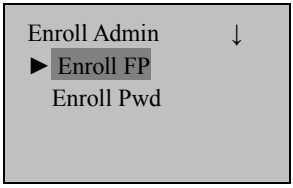
2) Press **Menu** to display the user management interface.



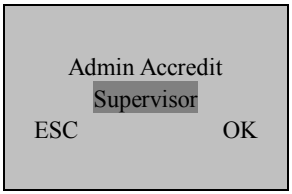
3) Press **2/3** to select "Enroll Admin" and then press **Menu**.

After that, the enrolled administrator can perform fingerprint or password enrollment, the operations are as follows.

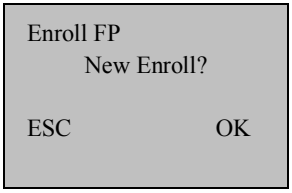
2.1.1 Enroll a Fingerprint



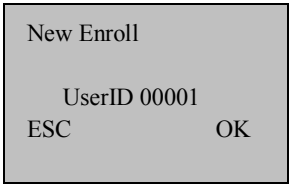
4) Enter "Enroll Admin" interface according to the operation in 2.1 Enroll an Administrator steps 1), 2), 3). Press **2/3** to select "Enroll FP" and then press **Menu**.



5) Press **2/3** to select "Admin Accredit", and then select "Supervisor" (Super administrator) or "Admin" (Administrator). Press **Menu** to confirm your selection.

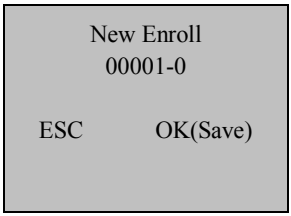


6) Press **Menu** to continue.



7) The system by default assigns unused user IDs from 00001 and you may also manually enter an unused user ID.

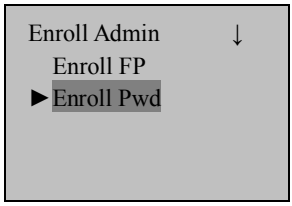
8) Press the same finger on the fingerprint sensor three consecutive times by adopting the proper finger placement mode. For details, see 1.3 Fingerprint Press Introduction.



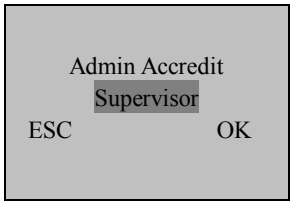
9) The system will prompt to save the enrollment information after the enrollment is successful. If the enrollment fails, the system will prompt to re-enroll fingerprint. The system returns to the "New Enroll" interface upon successful enrollment. You can continue or exit the fingerprint enrollment at that time.

Note: The last digit in "00001–0" refers to the fingerprint count. "0" refers to the first fingerprint, "1" refers to the second fingerprint and so on and so forth.

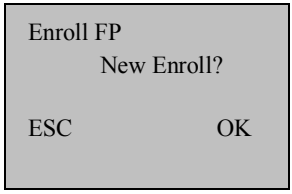
2.1.2 Enroll a Password



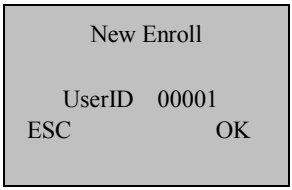
4) Enter "Enroll Admin" interface according to the operation in 2.1 Enroll an Administrator steps 1), 2), 3). Press **2/3** to select "Enroll Pwd" and then press **Menu**.



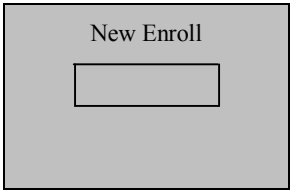
5) Press **2/3** to select "Admin Accredit", and then select "Supervisor" (Super administrator) or "Admin" (Administrator). Press **Menu** to confirm your selection.



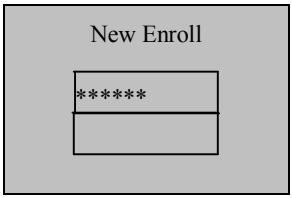
6) Press **Menu** to continue.



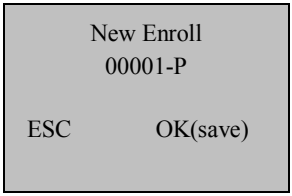
7) The system by default assigns unused user IDs from 00001 and you may also manually enter an unused user ID.



8) Input a password by pressing the number keys and press **Menu** to confirm your input.



9) Input the password again by pressing the number keys and press **Menu** to confirm your input.

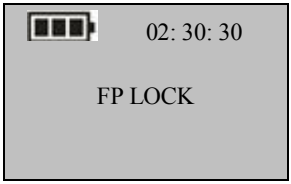


10) Press **Menu** to save the enrolled data, after successful password enrollment, the green indicator will light up for 3 seconds. If the enrollment failed, the red indicator will light up for 3 seconds, and prompt you to re-enroll it. Once the password is successfully enrolled, the procedure is completed.

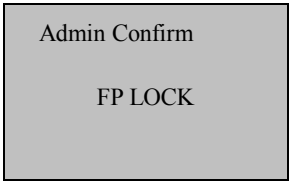
Note: A password consists of 6 to 10 digits. You can enroll only one password for each user ID and repeated passwords are forbidden; otherwise, the system will prompt “Password Error”.

2.2 Enroll an Ordinary User

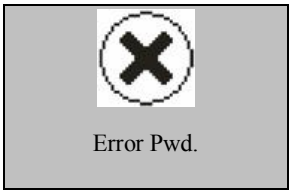
An administrator can enroll another administrator, or enroll ordinary users, with operations as follows:



1) Power on the FP Lock by pressing the **Menu** key to open up the initial interface.

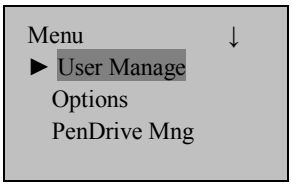


2) Press and hold the **Menu** key to access the menu. The system will prompt for administrator confirmation. Enter the administrator password or match your fingerprint once. Skip to step 4) if verification succeeds; otherwise, proceed to step 3.

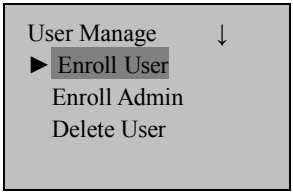


3) The system displays the prompt “Error Pwd.” on the screen and returns to the “Admin Affirm” interface for re-verification. The main menu interface is displayed upon successful verification.

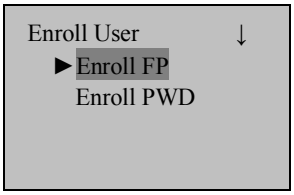
Or the system displays the prompt “Please Try Agn” on the screen and return to the “Admin Affirm” interface for re-verification. The main menu interface is displayed upon successful verification.



4) Press **MENU** to display the user management interface.



5) Press **2/3** to select "Enroll User" and then press **MENU**.

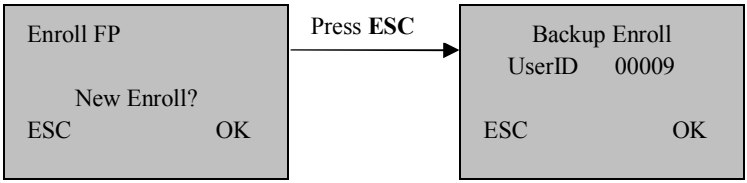


6) Enter the user enrollment interface.

After that, the enrolled administrator can perform fingerprint and password enrollment. The rest of the operations are basically the same with those of administrator enrollment. For details, see 2.1 Enroll an Administrator.

2.3 Backup Enrollment

On the "New Enroll?" interface of 2.2 Enroll an Ordinary User, if you press **ESC** to cancel new enrollment, then the “Backup Enroll” interface will be displayed, as shown in the following figure:

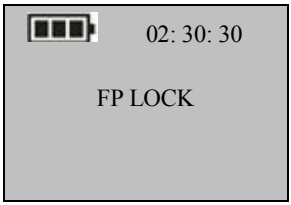


The backup enrollment operations are basically consistent with the new enrollment operations except that “Backup Enroll” instead of “New Enroll” is displayed on the top of the interface.

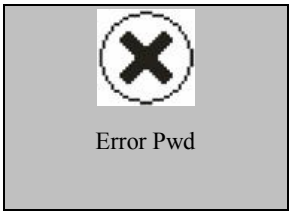
Note:

(1) It is recommended to enroll at least two different fingers for long-standing users.
(2) If you wish to modify the password after password enrollment finished, you can replace the original password with the password entered in the backup enrollment.

2.4 User Verification and Set NO Status



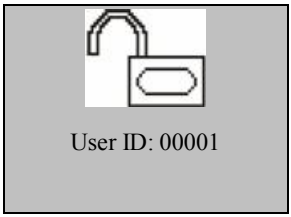
1) Press the **Menu** key to display the initial interface. The fingerprint sensor is in active state. Press your finger with enrolled fingerprint or enter your password (press **Menu** after entering password).



2) The device will prompt "Error Pwd" and return to the initial interface until verification successful.

Or the device will prompt "Please Try Agn" and return to the initial interface until verification successful.

Note: You can only match fingerprints when the FP Lock is in non-ON state.



3) Your ID number will be displayed on the screen upon successful verification and then you will hear the unlocking sound. Rotate the handle of the FP Lock within 4 seconds to open the door.

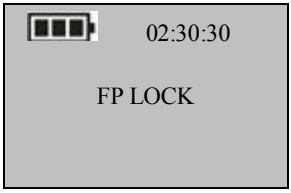
Note: When setting the NO option to "YES" (See 3.1.5 Normal Open Setting), If fingerprint or password verification is unsuccessful, the system will display a prompt "Please press your finger again" or "Password error". The parameters "Illegal Cnt." and "Illegal Alarm" are set by the administrator. The system will trigger an alarm after the illegal operations reach the specified value. For details, see 3.1.1 Operate Alarm Setting and 3.1.2 Illegal Times.

Note: If the value of the parameter "Illegal Cnt." is larger than 6 because the fingerprint verification failed or the password was entered 6 consecutive times, the system will automatically power off.

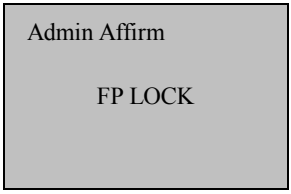
2.5 Delete User Information

Warning: In deleting user information process, it is strictly prohibited to disconnect the power supply, to prevent the deletion of other data by mistake!!!

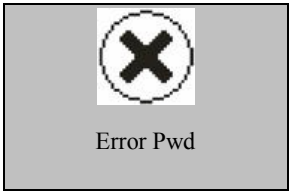
The operations are as follows:



1) Power on the FP Lock by pressing the **Menu** key to open up the initial interface.

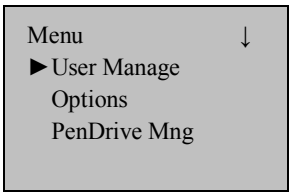


2) Enter the administrator password or match your fingerprint once. Move to step 4) if verification succeeds; otherwise, proceed to step 3).

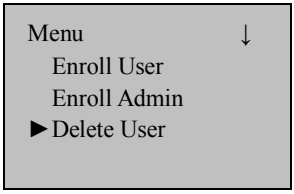


3) The system displays the prompt "Error Pwd" on the screen and returns to the "Admin Affirm" interface for re-verification. The main menu interface is displayed upon successful verification.

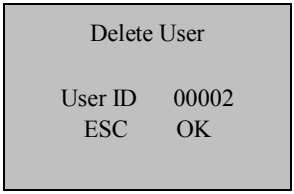
Or the system displays the prompt "Please Try Agn" on the screen and returns to the "Admin Affirm" interface for re-verification. The menu interface is displayed upon successful verification.



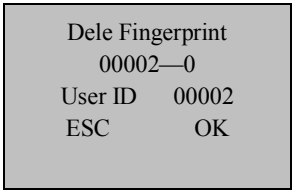
4) Press Menu to enter the user management interface.



5) Press **2/3** to select "Delete User", and then press **Menu**.

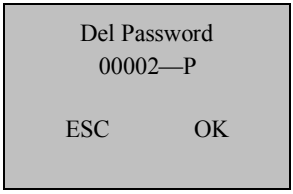


6) Press **2/3** to select the desired delete ID number, and then press **Menu** to confirm.



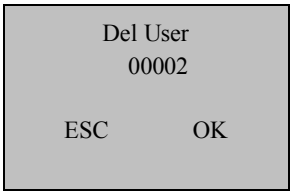
To delete the user fingerprint:

7) Delete the fingerprint of specific ID number, and press **Menu** to confirm.

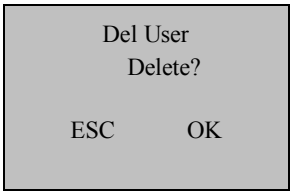


To delete the user password:

8) Delete user password, and then press **Menu**.



9) Press **Menu** to confirm the deletion of the user,. Otherwise press **1** (ESC) to return to "User management" interface.

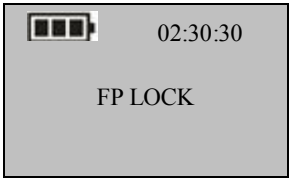


10) After the user deletion is finished, restart the device, and then verify the deleted user to check if the operation is succeeded.

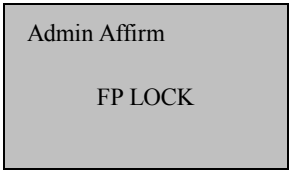
Note: The Administrator (includes super administrator) can only delete an ordinary user. If you need to delete the administrator ID, enter the "Adv Option" in "Options" menu, select "Clr admin pri", and return to "Delete user" option in user management menu to delete this user ID.

3. Lock Function and Settings

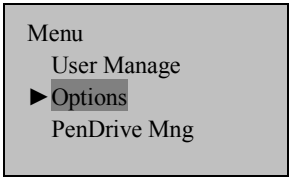
3.1 Operation Settings



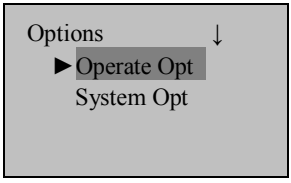
1) Press **Menu** key the device will power on and enter the initial interface. Press and hold **Menu** to enter the left interface.



2) Input the administrator password or press the administrator's enrolled fingerprint.

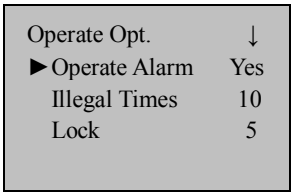


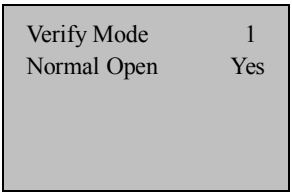
3) Press **2/3** to select "Options", and then press **Menu** to enter the menu.



4) Select "Operate Opt", and press **Menu** to enter the menu.

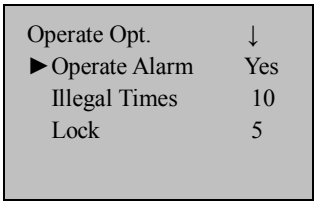
The "Operate options" menu includes **Operate Alarm, Illegal Times, Lock, Verify Mode, and Normal Open.**





3.1.1 Operate Alarm Setting

This parameter is used to set if the operation failure triggers the alarm.

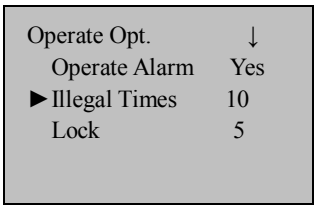


Follow the steps 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Operate Alarm". Press **Menu** to enter the modification state, press **2/3** to select Yes/No, after modification press **Menu** to save and quit.

3.1.2 Illegal Times

This parameter is used to set the consecutive operation failure count. An invalid operation alarm will be triggered when the consecutive failure count exceeds this threshold.

Note: The failure count starts to cumulate when the FP Lock is started. If the number of cumulative failures exceeds this threshold, the FP Lock will trigger an invalid operation alarm; otherwise, the failure count will be cleared after successful unlocking.



Follow the steps 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Illegal Times". Press **Menu** to enter the modification state, press **2/3** to set the value (the value by default is 10, the permit range is 3-99),

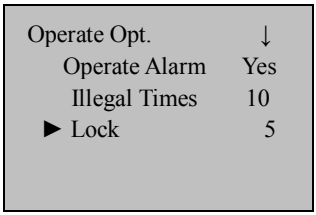
after modification, press **Menu** to save and quit.

If the number of cumulative failures exceeds this threshold, the FP Lock will automatically power off. After the device restarts the FP Lock will trigger an invalid operation alarm of a buzzing sound. After about 30 seconds it will power off automatically.

3.1.3 Lock Setting

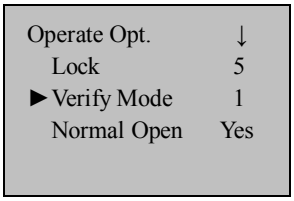
This parameter is used to set the duration from successful matching to unlocking.

Note: The unit, value and the maximum value of this parameter are standard configurations. If you need a larger value, please consult our commercial representatives or technical support engineers.



Follow the steps 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Lock". Press **Menu** to enter the modification state, press **2/3** to set the value (the value by default is 5, the permit range is 3-15), after modification, press **Menu** to save and quit.

3.1.4 Verify Mode Setting



Follow the steps 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Verify Mode". Press **Menu** to enter the modification state, press **2/3** to set the value. There are three optional values 0, 1, and 2 that represent different matching modes, and the default value is 1. Press **Menu** to

save and quit

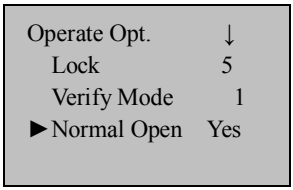
Verify Mode 0: Only the administrator can open the lock by successful matching, while the unlocking function is disabled for ordinary users.

Verify Mode 1: This is a default matching mode. Users can open the lock by successful matching.

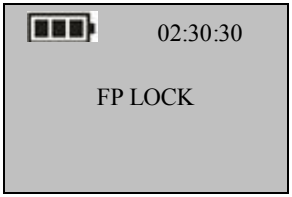
Verify Mode 2: This is a dual verification mode. The administrator can open the lock by successful matching, and an ordinary user can open the lock by passing the verification in any two matching modes.

3.1.5 Normal Open Setting

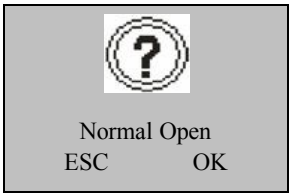
It is used to set the lock always in NO state.



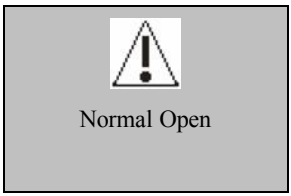
1) Follow the steps 1), 2), 3), 4) in 3.1 Operation settings, enter the operation menu and select "Normal Open". Press **Menu** to enter the modification state, press **2/3** to select Yes/No, after modification, and then press **Menu** to save and quit.



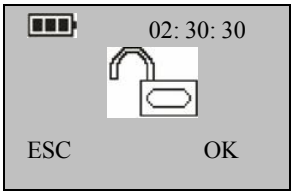
2) In the start interface verify the fingerprint (the finger press please refer to 1.3 Fingerprint Press Introduction) and unlock.



3) Prompt if you select NO state, and press **Menu** to save.

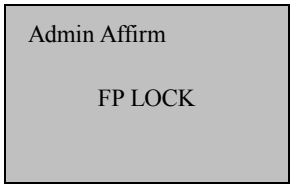


4) After successful setting, the screen will display as seen on the left. That indicate the setting is success, and the buzzing sound will be heard three times for prompt.

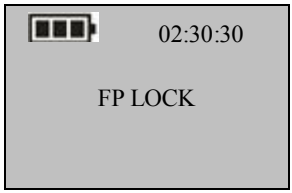


5) To disable the NO function, power on the system and press **Menu** in the "Normal Open" interface. Then the system closes the lock and automatically powers off.

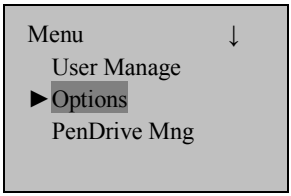
3.2 Language Settings



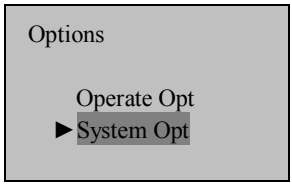
1) Press **Menu** and the device will power on, enter the initial interface. Press and hold **Menu** to enter the left interface.



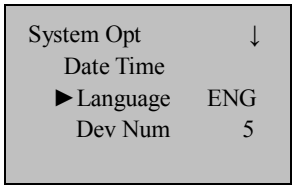
2) Enter the administrator password or match your fingerprint. Enter the next step after successful verification.

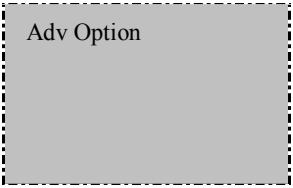


3) Press **2/3** to select "Options", and press **Menu** to enter the menu.



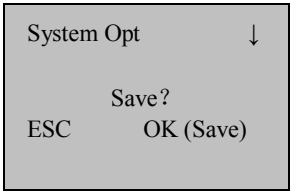
4) Press **2/3** to select "System Opt", and press **Menu** to enter the menu.





5) In the "Language Option" menu, press **3** to select the language, and press **Menu**

to enter the modification state. Press **2/3** to select "ENG" or "SCH", then press **Menu** to quit the modification state, press **1** (ESC) to enter the "Save" interface.

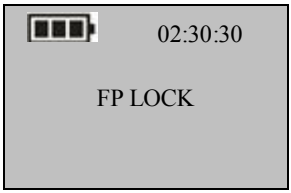


6) Press **Menu** to save settings, and it will take effect after device restart.。

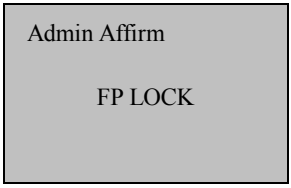
Note: Language selection is a non-standard function. To use this function, please consult our commercial representatives or technical support engineers.

3.3 Advanced Settings

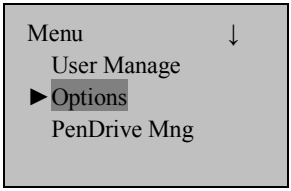
Note: Only the super administrator has the right to perform advanced settings.



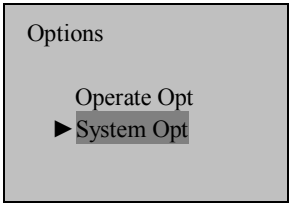
1) Press **Menu** and the device will power on, enter the initial interface. Press and hold **Menu** to enter the left interface.



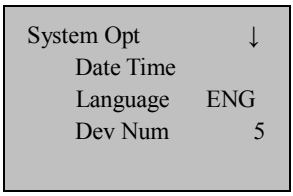
2) Enter the administrator password or match your fingerprint once. Enter the next step after successful verification.

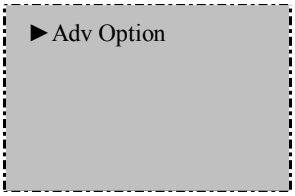


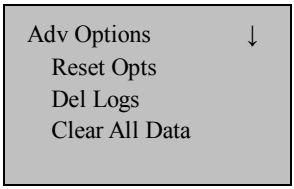
3) Press **2/3** to select "Options", and press **Menu**.



4) Press **2/3** to select "System Opt", and press **Menu**.







5) Select "Adv Options" under the System Opt menu, and then press **Menu** to enter the advanced option interface.

The advanced options include **Reset Options**, **Delete Logs**, **Clear All Data** and **Clear Administrator Privilege**. Press **2/3** to select the desired option, and then press **Menu** to enter the menu. Select the items and press **Menu** to execute the corresponding operation. The screen will return to "Advanced options" menu. If you press **1** (ESC) and quit, it will return to the advanced option menu without any operation.

Reset Options: This parameter is used to restore the FP Lock to factory defaults.

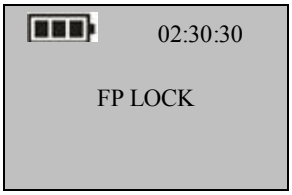
Delete Logs: This parameter is used to delete all the verification records from a memory chip.

Clear All Data: This parameter is used to delete all the enrolled fingerprint images, passwords and records.

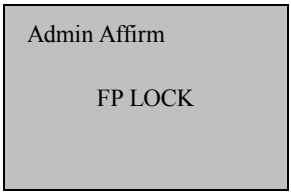
Clear Administrator Privilege: This parameter is used to change all administrators into ordinary users. This function should be used with caution. It is recommended to register at least one new administrator after using this function.

3.4 Browse System Information

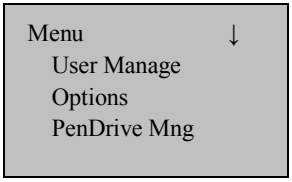
Users can browse the system information, including the enrolled fingerprint counts, enrolled user, and device information. To browse the system information, the operations are as follows.



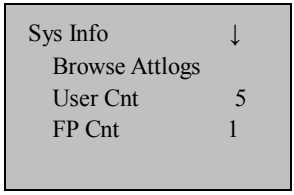
1) Press **Menu** and the device power on, enter the initial interface. Press and hold **Menu** to enter the left interface.



2) Enter the administrator password or match your fingerprint. Enter the next step after successful verification.



3) Press **2/3** to select "Options", and press **Menu** to enter the menu.



User Cnt: The number of enrolled users which can verify and unlock the FP Lock.

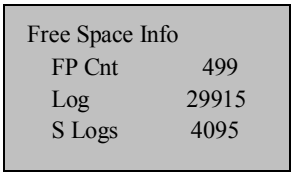
FP Cnt: The number of enrolled user fingerprints.

Log: The number of verification records in the FP Lock.

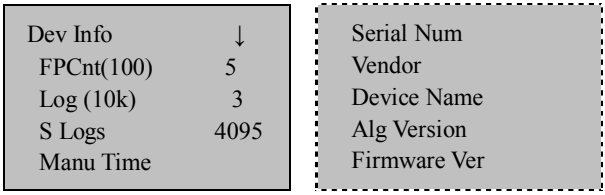
Admin Cnt: The number of enrolled administrators with management privileges (add user, delete user, etc.)

Pwd Usr: The number of users enrolled password.

Free Space Info: Press **2/3** to select "Free space information", and press **Menu** to see the detail.

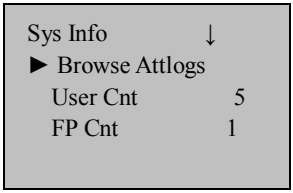


Dev Info: Press **2/3** to select "Device information", and press **Menu** to see the details as follows:

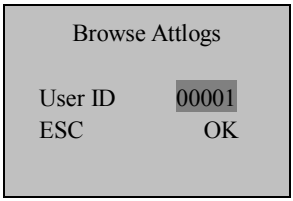


3.5 Browse Logs

The FP Lock supports the offline browsing of unlocking logs, which facilitates users to check whether there is any exceptional unlocking in time.

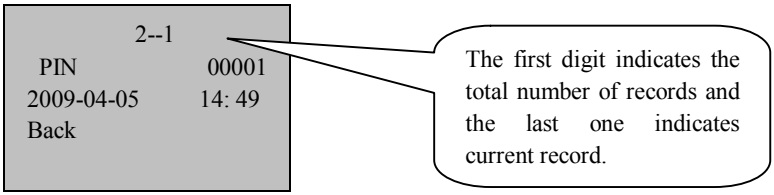


4) Please refer to 3.4 Browse System Information and follow steps 1), 2), 3), and enter the operation interface.

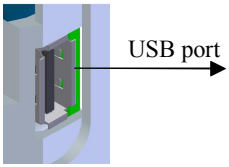


5) Press **2/3** to select "Browse Attlogs", shown as left pictures.

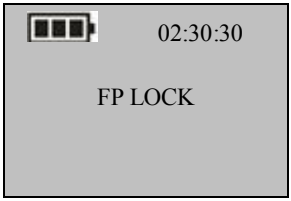
6) Press **2/3** to select the desired enrolled ID number, and press **Menu** to confirm the date and time of Attlogs.


2--1
PIN 00001
2009-04-05 14: 49
Back
The first digit indicates the total number of records and the last one indicates current record.

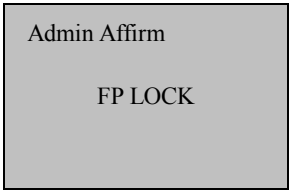
3.6 USB Pen Drive Management (Optional)



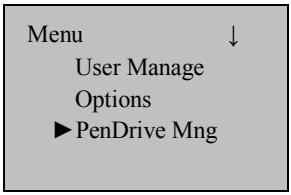
1) Insert a USB pen drive into the USB port.



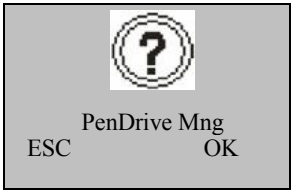
2) Press **Menu** to power on, and enter the initial interface.



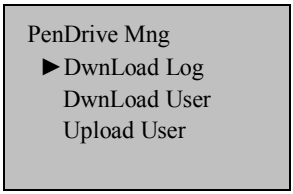
3) Press and hold **Menu**, input administrator password or press your fingerprint and verify to enter the next step.



4) Press **2/3** to select "PenDrive Mng", and press **Menu** to enter the next step.

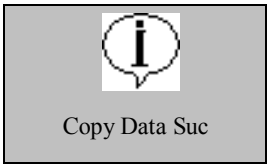


5) The device will prompt "PenDrive Mng"; press **Menu** to enter the management interface.



6) Press **Menu** to enter the detailed menu interface.

1. Download Attendance Logs



1) Press **2/3** to select "Dwn AttLog" and then press **Menu**. When download completes, the screen on left is displayed.

2) Press **1** (ESC) to return to the initial interface and then remove the USB pen drive. Now the USB pen drive stores two files: **X_attlog.dat** (attendance logs) and **X_user.dat** (Where "X" denotes that the device No.).

Tip: If the download succeeds, a prompt "Copy Data Suc" will pop up. If the system displays the prompt "Plug Pen Drive", check whether the USB pen drive is plugged in properly.

2. Download User Data

User data downloading is similar to the downloading of attendance logs. Enter the "PenDrive Mng" menu according to the procedure steps of 1), 2), 3), 4), 5), 6) of 3.6 USB PenDrive Management. Press **2/3** to select "DwnLoad User", the files **user.dat** (user information) and **template.dat** (fingerprint template) will be concurrently downloaded to the USB pen drive.

3. Upload User Data

Uploading user data is similar to the downloading of attendance logs. Enter the "PenDrive Mng" menu according to the procedure steps of 1), 2), 3), 4), 5), 6) of 3.6 USB PenDrive Management. Press **2/3** to select "UpLoad User" and then press **Menu**. The files **user.dat** (user information) and **template.dat** (fingerprint template) stored in the USB pen drive will be concurrently uploaded to the FP Lock.

Tip: When uploading user information, if a user ID already exists in the FP Lock, the new uploaded information will overwrite the existing user data; otherwise, the new user data will be directly added.

4. Upgrade Firmware

You can select "Upd Firmware" to upgrade the firmware of a FP Lock through the upgrade files in the USB pen drive.

Note: If you need firmware upgrade files, please contact our technical support engineers. Generally it is not recommended to upgrade the firmware.

Tip: Please do not perform invalid operations (for example, insert or remove the USB pen drive in a frequent manner or during upload/download) on the USB pen drive, because it may result in system instability. It is recommended to keep the door open during the use of the USB pen drive.

4. Other Functions

4.1 Routine Operation Indications

User operation success indication:

The buzzer sounds once, and the green LED indicator is light up for 3 seconds.

User operation failure indication:

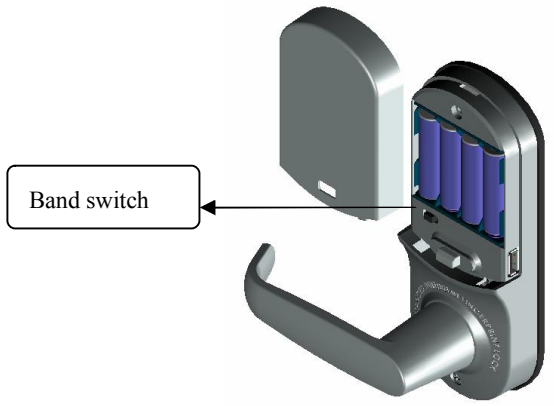
The buzzer sounds two short tones and the red LED indicator is light up for 3 seconds.

Warning indication:

The buzzer sounds five short tones consecutively.

4.2 Administrator Loss Prevention

To avoid the menu operation failure as a result of loss of the administrator, you may take the following measures: Press and hold the **Menu** key for 3 seconds to display the administrator verification interface. Then move the band switch on the rear of the FP Lock to the left or right. Now you can access the menu as a super administrator for management and operation.



4.3 Battery Low Voltage Protection

Low Voltage Protection: When the battery meter stays at one bar, the system prompts you to replace the battery and the battery icon starts flashing. If you press and hold the **Menu** key, the system will prompt you that you cannot access the menu. In addition, the menu is also inaccessible during use of external power so as to prevent data loss caused by power instability. When the battery meter stays less than one bar, the device shuts off automatically.

4.4 Program Automatically Exit and Power off

- The FP Lock powers off automatically upon successful matching and unlocking.
- The FP Lock powers off automatically when you set "**Yes"** for the "Normal Open" option upon successful matching and unlocking, and set as normal open state.
- The FP Lock powers off automatically when the number of illegal operations exceeds the threshold. And after restart, the FP Lock powers off automatically when an alarm is triggered for 30 seconds.
- The FP Lock powers off automatically when the supply voltage is lower than level-3 detection voltage.
- The FP Lock powers off automatically if there is no keystroke within 10 seconds on the initial interface.

5. Appendix: Technical Specifications

- **Screen:** OLED display;
- **Sensor:** Optics sensor without coating;
- **Capacity:** 500 fingerprint images; 100 passwords; 500 users;
- **Verification mode:** Fingerprint, password, fingerprint plus password matching;
- **Record capacity:** 30000;
- **Communication Mode:** USB flash disk;
- **Resolution:** 500 DPI;
- **Identification speed:** ≤ 2 seconds;
- **False acceptance rate:** ≤ 0.0001%;
- **False rejection rate:** ≤ 1%;
- **Power:** Four AA batteries; working voltage: 4.8V–6V;
- **Unlocking times:** ≥ 4000 (Four NANFU alkaline batteries) ;
- **Temperature:** -10–55°C;
- **Humidity:** 10%–95%.

This document is subject to change without prior notice.

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